

Work Order ID 157168

Thursday, February 16, 2017 8:12:14 AM

157168

Page 1

Item ID: D4022-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Fuel Pump Mounting Bracket

Start Date: 2/16/2017 Start Qty: 2.00

2

Cust Item ID:

Required Date: 3/2/2017 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4022

C

0.00

0.00

0.00

0.01

100

100

Purchasing

Purchasing

Memo

Issue P/O: 35347
Purchase part as per Dwg D4022
Part #: TC 250-100
Possible Supplier: Weldon
Material release note required

110

Receive & Inspect for Damage & Mat'l Certs

110

Packaging

Packaging

Memo

2 FEB 17 2017

DAS
13
9-89

2x 8017-02-23

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 157168

Thursday, February 16, 2017 8:12:14 AM

157168

Page 2

Item ID: D4022-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Fuel Pump Mounting Bracket

Start Date: 2/16/2017 Start Qty: 2.00

2

Cust Item ID:

Required Date: 3/2/2017 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

DAS
38
9-89

FEB 23 2017

130

Identify as per dwg & Stock Location: St 245

0.00

130

Packaging

Memo

0.00

Packaging

DAS
6
9-89

FEB 23 2017

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.03

Quality Control

DAS
21
9-89

FEB 24 2017

DAS
21
9-89

FEB 23 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

Picklist Print

Thursday, February 16, 2017 8:12:20 AM

Work Order ID: 157168

157168

Parent Item: D4022-3

D4022-3

Parent Item Name: Fuel Pump Mounting Bracket

Start Date: 2/16/2017

Required Date: 3/2/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP rev A 09.12.23 new Issue Prelim EC verified by: DD IPP Rev:B
10.05.17 as per ECN10-562 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
TC 250-100		Purchased	No			110	Each	0.0000	1	2			

TC 250-100

Fuel Pump Clamp

**

2x 8017-02-23

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

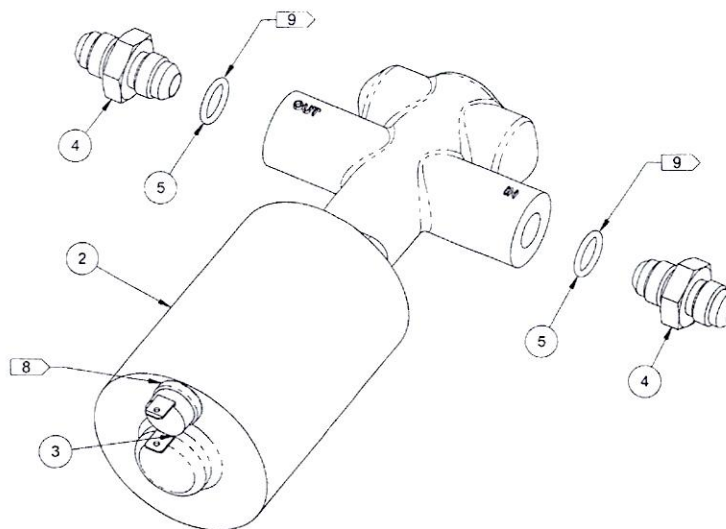
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
1	X	D4022-041	FUEL TRANSFER PUMP ASSEMBLY	A8150-B1-JCA
2	1	D4022-1	FUEL TRANSFER PUMP	
3	1	D4022-5	THERMAL SWITCH	
4	2	AN815-6D	FITTING, UNION	
5	2	MS29512-06	O RING	



D4022-041 FUEL TRANSFER PUMP ASSEMBLY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 157168MLS
1702-16

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 2.61 lbs
- 8) ATTACH D4022-5 THERMAL SWITCH TO D4022-1 FUEL PUMP IN LOCATION SHOWN USING METALSET A4
- 9) LUBRICATE O-RING WITH ULTRACHEM ASSEMBLY FLUID #1, FUEL-LUBE, MOLYKOTE 55 O-RING GREASE OR EQUIVALENT

C	CORRECTED TYPO: AN815-6D WAS AN818-6D, ZN D7-1. CORRECTED SPELLING OF "AEROSPARES", ZN B5-3.	DC	12.02.09
B	CORRECTED SPELLING OF "AEROSPARES". REF CAR 11-50.	DC	11.09.28
A	NEW ISSUE	HS	10.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>DC</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>DC</i>		
CHECKED	<i>DC</i>	DRAWING NO.	REV. C
MFG. APPR.		D4022	SHEET 1 OF 4
APPROVED	<i>DC</i>	TITLE	SCALE
DE APPR.		FUEL PUMP	NTS
DATE	12.02.09	COPYRIGHT © 2010 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

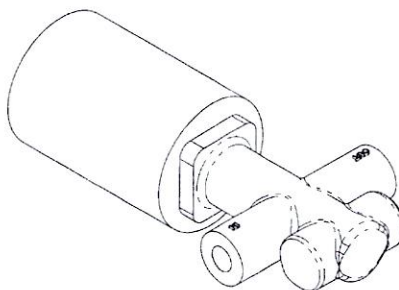
DART AEROSPACE
PART NUMBER

D4022-1

JOHN CAMERON AVIATION
PART NUMBER

REF JCA/M47/D3/SHT 13

SPECIFICATION CONTROL DRAWING



DART PART NUMBER	SUPPLIER	SUPPLIER PART NUMBER	OPERATING VOLTAGE	FLOW (GPH)	OUTPUT PRESSURE (PSI)	TEMPERATURE RANGE
D4022-1	WELDON	A8150-B1	24 VDC	35 - 50	5 - 25	-65°F TO +185°F
	AEROSPARES ACCESSORIES	A8150-B1	24 VDC	35 - 50	5 - 25	-65°F TO +185°F

D4022-X FUEL TRANSFER PUMP

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.6 lbs

DESIGN	JS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	BC		
CHECKED	JS	DRAWING NO. D4022	REV. C
MFG, APPR.			SHEET 2 OF 4
APPROVED	MA	TITLE	SCALE
DE APPR.		FUEL PUMP	NTS
DATE	12.02.09	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

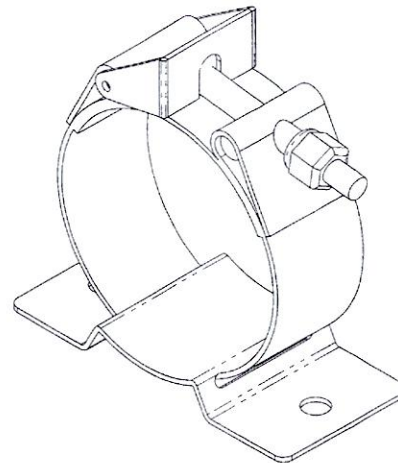
DART AEROSPACE
PART NUMBER

D4022-3

JOHN CAMERON AVIATION
PART NUMBER

REF JCA/M47/D3/SHT 13

SPECIFICATION CONTROL DRAWING



DART PART NUMBER	POSSIBLE SUPPLIER	SUPPLIER PART NUMBER	MATERIAL	FITS MOTOR SIZE (ϕ)
D4022-3	WELDON	TC 250-100	STAINLESS STEEL	2.5
	AIRCRAFT SPRUCE AND SPECIALTY	05-00021	STAINLESS STEEL	2.5
	AEROSPARES ACCESSORIES	TC 250-100	STAINLESS STEEL	2.5



D4022-X FUEL PUMP MOUNTING BRACKET

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A

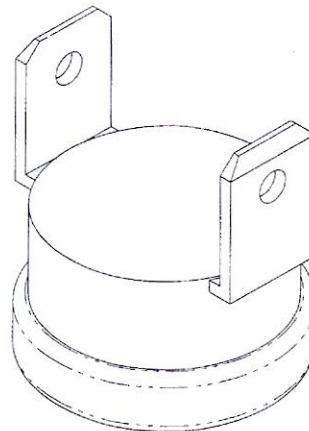
DESIGN	<i>JS</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>BC</i>		
CHECKED	<i>JS</i>	DRAWING NO. D4022	REV. C
MFG. APPR.			SHEET 3 OF 4
APPROVED	<i>MP</i>	TITLE FUEL PUMP	SCALE
DE APPR.	<i>MP</i>		NTS
DATE	12.02.09	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

2012-03-02
MP

DART AEROSPACE
PART NUMBER
D4022-5

JOHN CAMERON AVIATION
PART NUMBER
REF JCA/M47/D3/SHT 13

SPECIFICATION CONTROL DRAWING



DART PART NUMBER	POSSIBLE SUPPLIER	SUPPLIER PART NUMBER	ALTERNATE PART NUMBER	TEMPERATURE WHEN SWITCH OPENS
D4022-5	FARNELL	1006847	3775628	125°F
	HONEST-WELL	T23A125BSR2-15	3775628	125°F
	NEWARK	98K1992	3775628	125°F

D4022-X THERMAL SWITCH

NOTES:

- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) FINISH: N/A

DESIGN	JS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	BC		
CHECKED	JS	DRAWING NO. D4022	REV. C
MFG. APPR.			SHEET 4 OF 4
APPROVED	AW	TITLE FUEL PUMP	SCALE NTS
DE APPR.			
DATE	12.02.09	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO35347**

Purchase Order Date 2/17/2017 7:36:13 AM
PO Print Date 2/17/2017

Page Number 1 of 1

Order From :
AEROSPARES ACCESSORIES INC
20544 CONCESSION # 9,
RR #2
ALEXANDRIA, ON K0C 1A0
CANADA

VU-AER004

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FEB 17 2017

Contact Name
Vendor Phone 800 355 2157

Ship To Contact
Ship To Phone
Ship Via: FedEx Economy collect
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency USD
FOB Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable CD Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	TC 250-100 AS PER DWG D4022 REV. C B157168 DAS 38 9-89	Fuel Pump Clamp	2/27/2017 Yes 2/27/2017 2.00 Each	\$39.00	\$78.00
Line Total:					\$78.00
2	71401-45 Procurement Quality Clauses A005 right of entry A006 requirement for airworthiness certification A016 personnel qualification A025 certification of conformance A040 notification of quality escape A043 retention of quality documents	PROCUREMENT QUALITY CLAUSES	2/27/2017 No 2/27/2017 1.00	\$0.00	\$0.00
Line Total:					\$0.00
PO Total:					\$78.00

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 2/17/2017

Invoice

AEROSPARES ACCESSORIES INC.

20544 CON #9 ,R.R. #2
ALEXANDRIA, ONT. K0C-1A0
TEL 613-525-0924 FAX 613-525-0925

Date Invoice #
2017-02-21 241664

Invoice To

DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY, ON
K6A-1K7

Ship To

DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY, ON
K6A-1K7

P.O. No.	Terms	Rep.	Ship	Via	F.O.B.	Project
35347	Net 30	USD	2017-02-21	FEDEX COL...	ALEXANDRIA	

Item	Description	BATCH #	SERIAL #	Quantity	Price Each	Amount
TC250-100 F/C	CLAMP (2.50 DIA) New Weldon SHIPPING & HANDLING Fedex collect	lot 42828 w.b. 810174413763	n/a	2	39.00 0.00	78.00 0.00

SP17 02-23

DAS
38
9-89

The parts supplied hereon were
acquired directly from the O.E.M.,
or an approved supplier/repair
station which maintains a quality
assurance system providing full
traceability to source of supply.

Signature

Sales Tax Summary

GST (3) On Sales@13.0%	10.14
Total Tax	10.14

Thank you for your business.

Total

\$88.14

GST/HST No. 881274476